



NATIONAL WATER PROGRAM



FY 2005



MID-YEAR PERFORMANCE REPORT















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INTRODUCTION

The Environmental Protection Agency (EPA) recently published a new *Strategic Plan* and, in April 2004, the National Water Program developed the *National Water Program Guidance* describing how EPA, States, Tribes, and others would work together in FY 2005 to implement the new *Strategic Plan*. This *FY 2005 Mid-Year Performance Report* describes the progress being made as of the mid-point in FY 2005 (i.e. through March 2005) toward the goals and objectives described in the *Guidance* and the EPA *Strategic Plan*. Much of this work is accomplished through grants and this *Report* serves as the Office of Water's primary summary of progress under the Environmental Results Grants Order. *The Strategic Plan* and the *Guidance* are available on the Internet at www.epa.gov/water/waterplan)

This FY 2005 Mid Year Performance Report is based on materials and analysis developed during April and May by Subobjective Implementation Teams addressing each of the ten key subobjectives related to the National Water Program (see Table I, below). These briefing materials provide the most recent data concerning progress with respect to environmental and public health goals and accomplishment of key program activities along with recommendations for needed actions. Each Subobjective Implementation Team is co-chaired by senior managers from EPA's Headquarters and Regional Offices.

This *Report* includes three key elements:

- performance overviews, highlights, and next steps for each subobjective;
- overall conclusions and recommendations; and
- Appendices including summaries of recent reports by the EPA Inspector General and the Government Accountability Office; a summary of the recent review of program implementation in EPA's Region 10 will be posted to the Internet shortly.

The National Water Program will develop a report on progress at the end of FY 2005 in conjunction with the publication of the EPA Annual Performance Report.

TABLE I NATIONAL WATER PROGRAM – KEY SUBOBJECTIVES

- 1) Water Safe to Drink
- 2) Fish and Shellfish Safe to Eat
- 3) Water Safe for Swimming
- 4) Restore and Improve Water Quality on a Watershed Basis
- 5) Protect Coastal and Ocean Waters/Estuaries
- 6) Protect Wetlands
- 7) Protect Mexico Border Water
- 8) Protect the Chesapeake Bay
- 9) Protect the Great Lakes
- 10) Protect the Gulf of Mexico

II MID-YEAR PERFORMANCE BY SUBOBJECTIVE: OVERVIEW, HIGHLIGHTS AND NEXT STEPS

This section provides a summary of the mid year reports provided by Subobjective Teams on progress toward accomplishment of environmental and program goals described in the *National Water Program Guidance for FY 2005*.

Each subobjective report include the following key information:

- a brief narrative summary of performance with respect to the outcome (i.e. environmental or public health goal) stated in the EPA *Strategic Plan*;
- a list of highlights with respect to program implementation, including both areas of success and areas needing attention; and
- key next steps to strengthen implementation of the subobjective and improve performance prior to end-of-year reporting and in the long run.

It is important to note that more detailed information concerning performance under each of the outcome and program measures is provided in Appendix A and is available on the Internet at www.epa.gov/wate/waterplan). The data in Appendix A may be current at of the mid-point in FY 05 or it may be current as of an earlier date. For those measures where data as of the mid year was not available, the most recent data available since the 2002 baseline is provided.

SUBOBJECTIVE: WATER SAFE TO DRINK

Subobjective: Percent of the population served by community water systems (CWSs) that receive drinking water that meets all applicable health-based drinkingwater standards through effective treatment and source water protection.

2002 Baseline: 93.6% 2005 Commitment: 91% 2008 Target: 95%

2003 Report: 89.6% 2004 Report: 90.0%

Performance Overview

The rate of compliance with drinking water standards by community water systems remains high at about 90%. The overall compliance rate improved slightly between 2003 and 2004 (from 89.6% to 90%), but has not returned to the 2002 baseline rate of 93%. Although mid-year 2005 data is not available, EPA expects to meet the 91% compliance target by the end of the year. Progress toward the 2008 target of 95% compliance may be slowed over the next several years as several new drinking water standards take effect and initial implementation efforts result in some non-compliance.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

- Community water systems are making significant progress in minimizing risk through the development and implementation of source water protection strategies. By the end of 2004, about 12% of community water systems had implemented source water protection plans. Despite this progress, accomplishment of the 2005 commitment of 20% of water systems implementing source water strategies and 50% of systems implementing strategies in 2008 will be a major challenge.
- Tribal community water systems reported 90% compliance with drinking water standards in 2004, the same level as the 2005 commitment.
- States and Tribes are reporting mid-year progress toward the completion of sanitary surveys and are on track to meet 2005 end-of-year commitments.
- Although the Underground Injection Control Programs are making good progress in identifying wells and addressing violations in the case of Class I, II, and III wells, EPA is not on track to meet 2005 commitments for Class V wells or Class V motor vehicle wells.
- EPA is on track to develop baseline information concerning the adoption (under the Clean Water Act) of public water supply uses for surface waters uses as sources of drinking water, and expects to be able to implement measures to coordinate Clean Water Act programs for the benefit of source waters in FY 2007.

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report..

Next Steps

Key next steps identified by the Subobjective Team include:

- Expanding efforts to support community water systems and States in implementation of source water protection plans. EPA is working with the Trust for Public Lands and other stakeholders to develop a "Roadmap" for Source Water Protection program implementation. A key element of this effort includes stressing the importance of protection of source water on a watershed basis. EPA will post on the Internet examples of good local source water protection programs.
- EPA has initiated expanded efforts to support effective implementation of the Underground Injection Control Program with respect to Class V wells, including motor vehicle wells. EPA will expand technical assistance and monitor program progress with the goal of identifying the most significant non-compliance problems.
- The EPA Office of Water will expand efforts to coordinate with the EPA Office of Enforcement and Compliance Assurance to help community water systems comply with new regulations taking effect in 2006.
- EPA recognizes that many States face funding limitations and will work with Congress to remove barriers to States' use of funds set-aside from State Revolving Loan Funds for technical assistance, capacity building, and source water protection where appropriate.
- EPA believes that the Area wide Optimization Program is working well, especially in Regions 4 and 6, to resolve non-compliance problems and avoid potential non-compliance through increased coordination among States and EPA. EPA will encourage other Regions and States to expand implementation of this program.
- EPA has identified as particularly successful a program developed by the State of Kansas that provides training for members of Boards of local water systems. In this program, water systems that provide Board members training earn points toward State Revolving Loan Funds.



SUBOBJECTIVE: FISH AND SHELLFISH SAFE TO EAT

Subobjective (Part A): Improve the quality of water and sediments to allow for increased consumption of safe fish in a percentage of the river miles/lake acres identified by States or Tribes as having a fish consumption advisory in 2002.

2002 Baseline: 485,205 river miles and 11,277,276 lake acres under advisory 2005 Commitment: 1% of advisory waters improved By 2008: 3%

2005 Mid-Year: To be reported this summer

Subobjective (Part B): Increase the percentage of shellfish-growing acres monitored by States that are approved or conditionally approved for use.

1995 Baseline: 77% of 21.6 million acres open for use

2005 Commitment: 80% acres open for use By 2008: 85%

2003 Report: 91%

2005 Mid-Year: Not available

Performance Overview

EPA is now gathering data concerning improvements in waters with fish consumption that would allow for increased consumption of safe fish, and expects to release this data this summer.

In the case of shellfish growing waters, data released by the Interstate Shellfish Sanitation Conference indicate that the percentage of monitored waters open for use increased to 91% in 2003.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

EPA does not expect to meet the goal of increasing the percentage of waters nationwide where fish tissue will be assessed to support decisions concerning consumption advisories. Based on an initial assessment of the data, EPA expects little change from the current 35% of lake acres and 24% of river miles reported in 2004.

- EPA is making significant progress in working with States to help them adopt fish tissue monitoring and assessment guidelines that are consistent with national guidance. As of the end of 2004, 92% of States had adopted national guidance, up from 82% in 2002.
- EPA supported Tribes in development of fish tissue monitoring capability and increased the number of Tribes using national guidance from 3 in 2002 to 5 in 2004.
- A total of 9 States have adopted the fish tissue criterion for mercury, published by EPA in January of 2001. Although EPA has not set a target for State adoption of the mercury criterion, EPA generally expects that States will adopt new criteria within 5 years. Many States, however, are awaiting EPA publication of supporting guidance for the mercury criterion, now expected to be published this summer.
- States are making good progress in the adoption of shellfish data systems that provide the geographic location of shellfishing areas as well as the overall condition of shellfish areas. A total of 11 States have now adopted the Shellfish Information Management System (SIMS), greatly increasing the ability of EPA and State agencies to identify pollution sources contributing to closure of shellfishing areas and to design strategies to reopen these valuable resources.

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report.

Next Steps

Key next steps identified by the Subobjective Team include:

- The Office of Water is developing guidance concerning the new mercury criterion and will expand efforts to assist States in adoption of this more scientifically sound criterion.
- The Office of Water will continue cooperative efforts with the Office of Air and Radiation concerning air deposition of mercury, including refinement of maps of air deposition of mercury and regional mercury models and will continue cooperation in Agency mercury reduction strategies.
- EPA will encourage the use of the SIMS as a database for shellfish data while discussing with State alternative mechanisms.
- The Office of Water will expand efforts involving the Office of Research and Development and other Federal agencies to improve consistency of assessments of pathogens in shellfish beds.



SUBOBJECTIVE: WATER SAFE FOR SWIMMING

Subobjective: Restore water quality to allow swimming in waters identified by States in 2000 as unsafe for swimming:

2000 Baseline: 90,000 stream miles/2.6 million lake acres

2005 Commitment: 2%of impaired waters restored By 2008: 5%

Performance Overview

Although data concerning waters safe for swimming in 2005 is not yet available, the most recent data, from 2002 State reports, indicates that the number of lake acres and river miles unsafe for swimming is increasing, rather than decreasing. Lake acres identified as unsafe for swimming increased from about 2.6 million in 2000, to about 3.2 million in 2002. River miles unsafe for swimming increased slightly from 90,000 miles to about 92,000 miles. These increased may be partly attributable to increased beach monitoring and reporting.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

- In early FY 2005, EPA published regulations establishing the current pathogen criteria for coastal recreational waters, increasing the number of coastal States and Territories, with current criteria from 11 in 2002 to all 35 coastal States and Territories.
- EPA and States committed in 2005 to monitoring and managing 91% of significant public beaches under the BEACH Act. Mid-year data indicate that 99% of these beaches are being monitored.
- EPA has a long-term goal of increasing the number of days that beaches monitored under the BEACH Act are open for swimming from about 94% in 2002 to 96% in 2008. Data (to be provided by May 28th) indicate that EPA met the 2005 commitment of maintaining the goal of 94% of days open.
- EPA is on track to meet the FY 2005 commitment of 47% of permits for combined sewer overflows having schedules in place. Mid-year progress under this measure is 44% of permits with schedules in place (i.e. 366 permits). EPA expects to meet the 2008 goal of 75% of permits with schedules in place.

- EPA is making some progress in working with States to encourage the adoption of Voluntary Management Guidelines for on site/decentralized sewage treatment systems, increasing the number of States adopting guidelines from only 2 in 2002 to 5 at the 2005 mid-year. A total of 8 States are expected to adopt guidelines by the end of FY 2005.
- Several program activities being implemented for the Great Lakes, including the BEACH program and the control of combined sewer overflows, have an important impact on swimming waters and are described in greater detail in Section II.8.

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report.

Next Steps

Key next steps identified by the Subobjective Team include:

- The Office of Water will work with the Office of Research and Development, the
 Centers for Disease Control, and the Council of State and Territorial
 Epidemiologists (CSTE) to evaluate options for the development of a public access
 database on disease outbreaks associated with recreational water exposure.
- In order to stay on track toward meeting the goal of developing schedules for implementation of Long Term Control Plans in combined sewer overflow permits, EPA will expand technical assistance and improve intra-agency coordination.
- EPA is developing an action plan for detecting the impacts of malfunctioning septic systems.
- EPA Regions 1 and 9 have both developed Beach Strategies for expanding and improving the implementation of BEACH Act programs within States in the Region. Region 5 and the Great Lakes National Program Office are assisting in the development of a Coastal Human Health Strategy for the Great Lakes.



SUBOBJECTIVE: PROTECT WATER QUALITY ON A WATERSHED BASIS

Subobjective (Part A): Use both pollution prevention and restoration approaches to increase

the number of watersheds where water quality standards are met in at least 80 percent of the assessed water segments:

2002 Baseline: 453 watersheds of the total 2,262 USGS cataloguing unit scale watersheds across the Nation

2005 Commitment: 462 watersheds 2008 Target: 600

2005 Mid-Year: Not available

Subobjective (Part B): Restore a percentage of those water bodies identified in 2000 as not attaining standards:

2000 Baseline: 21,632 waterbodies

2005 Commitment: 2% 2012 Target: 25%

2005 Mid-Year: Not available

Performance Overview

Data from States concerning progress toward restoration of impaired waterbodies on a watershed basis is being evaluated by EPA and will be provided at the end-of-the year. Commitments for FY 05 and targets for FY 06 (see Appendix 1) provide an indication that the goal of 600 watersheds having greater than 80% of assessed waters meeting standards by 2008 is unlikely to be met. Although improvement of water quality on a watershed scale is proceeding more slowly than expected, restoration of individual impaired waters is on track. Although Regions and States have not yet confirmed restorations beyond 2002, they expect to meet the goal of restoring 2% of the 21,632 waters listed as impaired in 2000 by the end of 2005 and 5% of these waters by 2006. Attainment of the goal of restoring 25% of these waters by 2012 is less certain.

Performance Highlights:

Highlights of mid-year assessments of progress by the Subobjective Team include:

- Performance with respect to the water quality standards program is generally on track. States are submitting revisions to water quality standards on schedule and EPA is approving State standards submissions on schedule in most cases. States are on track to develop nutrient criteria and biological criteria. FY 2005 goals for development and approval of Tribal water quality standards, however, may not be accomplished.
- States are on track to develop and begin implementing water quality monitoring strategies consistent with national monitoring guidance. At the mid-year, 23 States had accomplished this work and all States are expected to be implementing monitoring strategies by the end of FY 2005.
- States and EPA are ahead of schedule in the development of TMDLs. Regions have approved over 2,200 TMDLs, and at the mid-year have approved 76% of the TDMLs scheduled to be completed in FY 2005.
- EPA and States are not making expected progress in development of water quality trading in the context of TMDLs. EPA has a goal of developing 25 TMDLs that provide for trading in FY 2005, but has developed on 6 such TMDLs at the midyear. EPA also tracks the number of permits providing for trading, but does not have mid-year data.
- EPA has made a special effort to work with States to identify the highest priority permits from an environmental risk perspective, and to give these permits top priority for action. Mid-year data indicates that in FY 05, 39.5% of priority permits have been issued, slightly off the pace needed to meet the goal of 95% of priority permits being current.
- States are ahead of schedule in the issuance of Phase II storm water permits for municipalities and for construction.
- As a result of recent court decisions, States are behind schedule for updating regulations to reflect requirements for Concentrated Animal Feeding Operations (CAFOs) (25 States at the mid-year; end-of-year target of 40) and issuance of general permits (26 States at the mid-year; end-of-year target of 39).

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report..

Next Steps

Key next steps identified by the Subobjective Team include:

- The Office of Science and Technology will convene Region/General Counsel management level review teams to identify bottlenecks in the review and approval of Tribal water quality standards.
- The Watershed Manger's Forum will take the lead in drafting a national strategy for supporting local watershed groups in expanding participation in watershed protection and will present this strategy to Water Division Directors in September.
- The Water Quality Subobjective Team will prepare for the Deputy Assistant Administrator a briefing identifying issues and opportunities related to attainment of the goal of restoring 25% of impaired waters by 2012 and for improving progress toward watershed restoration. The briefing should include proposals for the further development of Regional "Watershed Game Plans" and the expression of common elements of these Regional strategies at the national level.
- The Office of Water will work with Regional managers to review opportunities for including trading authority in TMDLs and in permits, and will work with each Region focus on this important effort.
- EPA Region 9 will manage a review of priority permits by all Regions and an assessment of steps needed to ensure that EPA attains its target of 95% of these permits being current.
- The Office of Water will work with Regions to develop additional information concerning key measures where data is lacking including:
 - the number of watershed based plans developed under the 319 NPS program (PAM # 49);
 - for the pretreatment program, the percentage of significant industrial users and categorical industrial users that control mechanisms in place (PAM # 63);
 - the number of watershed permits issued (PAM # 68); and
 - the number of follow-up actions identified for States based on Permitting for Environmental Results reviews that are on schedule (PAM # 69).
- The Office of Water will work to align reporting methods concerning load reductions (PAMs # 64 and # 65) to assure that they are consistent with Performance Assessment and Rating Tool (PART) commitments.

- The national Clean Water State Revolving Loan Fund program will work with States during FY 2005 to develop improved measures for the measurement of environmental benefits of the CWSRF loans based on a commitment in the CWSRF PART review.
- The Office of Water will take several steps to improve management of tribal clean water programs, including:
 - support Regional efforts to approve Tribal water quality standards;
 - publish guidance for Trial water quality monitoring strategies;
 - improve the percentage of priority permits and all permits on Tribal lands that are current.



SUBOBJECTIVE: PROTECT COASTAL WATERS

Subobjective: Improve national and regional coastal aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report. (Rating is a 5-point system in which 1 is poor and 5 is good.

2002 Baseline: "fair/poor" or 2.4 2005 Commitment: 2.5 2008 Target: 2.6

2004 Report: 2.3

Performance Overview

The second edition of the National Coastal Condition Report (NCRR II), published in early 2005 and describing conditions in 2004, includes an overall assessment of coastal water quality conditions. Based on these indicators, the overall health of the Nation's coastal waters is fair. This is essentially the same as the findings from the first NCCR issued in 2001 (2.3 rather than 2.4 on a five point scale).

From a regional perspective, the condition of the coastal waters in the Southeast, Gulf of Mexico, and Great Lakes has improved since the first NCCR, while the Northeast and West coasts remain the same.

Among the key indicators, coastal habitat condition, sediment quality, and benthic condition ranked the lowest; whereas, individual components of water quality, including dissolved oxygen and dissolved inorganic nitrogen, ranked slightly better.

{Note that the NCCR II used improved methods for assessment. When the original report scores are adjusted to reflected the improved methods, the adjusted national score is 2.0 rather than 2.4. Comparing the original corrected score of 2.0 to the new score of 2.3 shows a slight improvement in conditions. The indicator showing the greatest improvement in corrected scores is water quality (1.5 to 3.2) followed by benthic quality (1.5 to 2.0). Sediment quality and fish tissue score both declined slightly while the coastal habitat index remained essentially the same.}

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

 Regions report no indication of significant deviations from commitments to restoration of habitat with the National Estuary Program study areas.

- Progress at the mid-year is generally on track for most program activity measures including measures relating to:
 - ballast water;
 - management of the National Estuary Program estuaries (i.e. return on Federal investment, priority actions initiated and completed, and development of key indicators to track environmental progress);
 - marine debris monitoring network operations;
 - development of dredged material management plans for major ports and harbors;
 - monitoring of ocean disposal site management plans; and
 - coastal State training and monitoring related to air deposition.
- Reporting by the Corps of Engineers of the beneficial use of dredged material is not yet established.

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report..

Next Steps

Key next steps identified by the Subobjective Team include:

- A key priority for the Subobjective Team is to ensure there is an adequate mechanism to fund future reports on the condition of coastal waters, including a third National Coastal Condition Report in 2007 and a comparable report addressing National Estuary Program areas in 2006.
- EPA will work with the Army Corps of Engineers to develop methods for reporting on the beneficial use of dredged material.
- EPA will work with Regions to further improve procedures for reporting of results under National Estuary Program measures through Regional offices, rather than directly to Headquarters.
- EPA will work with other water programs, including the storm water program and the wetlands program, to further improve coastal water quality
- EPA will partner with other Federal agencies to assure the effective implementation of the Ocean Action Plan and support the work of the Coral Reef Task Force and the National Dredging Team.



SUBOBJECTIVE: PROTECT WETLANDS

Subobjective: Working with partners, achieve a net increase of acres of wetlands with additional focus on biological and functional measures.

2002 Baseline: annual net loss of an estimated 58,500 acres.

2005 Commitment: 100,000 2008 Target: 400,000

2005 Mid-Year: Data not available

Performance Overview

Although data concerning the goal in the EPA *Strategic Plan* concerning the creation of 100,000 acres of wetlands per year is not available, information describing progress toward broader wetlands goals, identified by the President after the publication of the *Strategic Plan*, is available. Additionally, the President called for creating, improving and protecting a total of three million acres of wetlands over five years. The wetlands data, provided in a report, titled *Preserving America's Wetlands, Implementing the President's Goal* (SEQ., April 2005), indicates that since April 2004, 832,000 acres have been restored, created, protected or improved including:

- 328,000 acres restored or created;
- 154,000 acres improved; and
- 350,000 protected.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

 At the mid-year, EPA is on track to meet end-of-year commitments for wetlands related measures, including support for Tribal wetland and watershed projects and development of State capacity to measure wetlands conditions.

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report..

Next Steps

Key next steps identified by the Subobjective Team include:

- The wetlands program will continue cooperative efforts with other water programs and with the Army Corps of Engineers to implement wetlands programs on a watershed basis.
- The wetlands program will continue work to improve data with respect to wetlands gains and losses in function and the ability to reflect wetlands condition.



SUBOBJECTIVE: MEXICO BORDER WATERS

Subobjective (Part A): Achieve water quality standards currently being exceeded in shared and transboundary waters where standards currently being exceeded:

2002 Baseline: n/a 2005 Target: n/a 2008 Target: >50%

Measure not operational

Subobjective (Part B): Protect the health of people in the Mexico border area by providing adequate water and wastewater sanitation systems funded through the Border Environmental Infrastructure Fund:

2002 baseline: 790,000 persons provided access 2005 Commitment: 1.5 million

2004 Report: 1,163,000

Performance Overview

Progress toward the 2005 goal of protecting the health of 1.5 million people by providing adequate water and wastewater sanitation systems has been steady through 2004 but has slowed in early 2005 because certification of new projects has been halted pending completion and implementation of a project priority system expected to be operational by the end of FY 2005.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

- EPA worked with other parties to develop a consistent, quality assured data set of 14 key parameters for measurement of water conditions and reached binational agreement on the data set.
- EPA began the process of identifying binational, shared water bodies/segments that are impaired. EPA expects to complete the process of identifying significant, transboundary that are impaired by the end of FY 2005.

- EPA began development of a border-wide water quality report.
- EPA is partnering with the Environmental Finance Advisory Board in exploring alternative US/Mexico funding approaches with discussion/recommendations expected in August 2005.

Next Steps

Key next steps identified by the Subobjective Team include:

- EPA will use assessments of significant transboundary waters to develop plans to improve restoration of impaired waters.
- -- EPA will develop and advance alternative financing proposals for water and wastewater facilities.
- EPA will transition to a new measure of performance related to water and wastewater services "By 2012, promote a 25% increase in the number of homes connected to potable water supply and wastewater collection and treatment systems. As part of this work, EPA will develop a baseline for the measure describing the geographic area and the number of homes in that area which are connected to potable water supply and wastewater treatment and collection systems as of a baseline date.



SUBOBJECTIVE: GREAT LAKES

Subobjective: Prevent water pollution and improve the overall aquatic ecosystem health of the Great Lakes using the Great Lakes 40-point scale:

2002 Baseline: 20 points 2005 Commitment: 21 2008 Target: 22

2005 Mid-Year: 21.9

Performance Overview

The Great Lakes index is projected to improve in 2005 from the 2002 baseline of 20 to 21.9 out of a possible score of 40, surpassing the 2005 estimate of 21 and approaching the 2008 goal of 22. Indices for coastal wetlands, drinking water, and air toxics deposition are improving. A key concern is the increased level of phosphorus in Lake Erie, believed to be the result of invasive species, and the growth in the size of the dead zone in the Lake.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

- The "Great Lakes Regional Collaboration of National Significance" (GLRC) was launched toward the end of 2004 after considerable outreach and discussion with Great Lakes governmental partners at the State and local levels, key Great Lakes organizations, and stakeholders. The GLRC is governed by an Executive Committee that is overseeing the effort to develop a strategic plan. The Executive Committee has established eight "Strategy Teams" corresponding to priorities established by the Great Lakes governors and adopted by the Great Lakes mayors. Work of the Strategy Teams and the Executive Committee is currently underway and will culminate in "Summit I" during the Summer 2005, and "Summit II" in December 2005 at which time the final Strategic Plan will be released
- EPA and Great Lakes States are ahead of schedule at the mid-year in the monitoring of 100% of Great Lakes Tier I (significant) beaches consistent with the National Beach Guidance. In addition, almost 80% of all other Great Lakes public Beaches have monitoring and notification programs.

- Progress in delisting Areas of Concern (AOCs) is slow. One to two AOCs may be de-listed by year end, rather than the targeted 3. EPA is, however, on target for the longer-term goal of de-listing 10 AOCs by 2010. The delay is the result of the environmental complexities of problems in the AOCs (contaminated sediments, inadequate wastewater infrastructure). The Great Lakes Legacy Act and the unprecedented cooperation taking place under the Great Lakes Regional Collaboration's AOC/Sediments Strategy Group will substantially support future delisting progress.
- Data are inconclusive regarding achievement of a 5% annual decline in the average percentage concentrations of PCBs in whole lake trout and walleye. The February 2005 review of the Great Lakes Fish Monitoring Program (GLFMP) re-evaluated the program's data quality objective, determining that small annual changes in concentration are not considered statistically significant and that a longer time period (ex. 10 years) was necessary. A second program review is being planned in order to (i) revise the Data Quality Objectives to reflect the current levels of contaminants in fish and allow continuation of the GLFMP's 30+ year trend line and (ii) evaluate the representativeness of the fish data for the whole lake.
- The Great Lakes program is on track to meet most other commitments.

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report.

Next Steps

Key next steps identified by the Subobjective Team include:

- Beneficial Use Impairments stemming from contaminated sediments have been identified in all 31 AOCs in the United States. Although progress has been made to address this problem, the array of existing programs has not been adequate to get the job done during the 20 years since AOC designation. Both the GAO and the International Joint Commission have been critical of the slow progress in this area. The AOC/Contaminated Sediment Strategy Team as part of the Great Lakes Regional Collaboration is considering a recommendation to fund the Legacy Program at \$150 million over 15 years, as a means to adequately address the problem in a timely manner.
- The Great Lakes program will need to plan for the effective management of Great Lakes Legacy Act funding (\$9.9M and \$22.3M in FY04 and FY05, with \$50M proposed for FY06). No FTE have been provided to support the program.
 GLNPO is currently funding approximately 6-7 FTE with Legacy resources. Full funding (\$54 million for the Legacy Act) would require a total of 14 FTE.



SUBOBJECTIVE: CHESAPEAKE BAY

Subobjective: Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved and acres of submerged aquatic vegetation increase.

2002 Baseline: 85,252 acres 2005 Commitment: 90,000 2008 Target: 120,000

2005 Estimate: 89,659

Performance Overview

A key measure of success, which integrates both water quality and essential aquatic habitat, is the restoration of submerged aquatic vegetation (SAV). Beginning in FY05, achievement of SAV targets is measured based on the "single best year" of acreage as observed through the most recent three years of data from the aerial survey. Baywide, the single best year in the 2002-04 period was 89,659 acres in 2002. Based on data from the most recent survey in 2004, however, the baywide SAV acreage had declined to 72,935. This downward trend will need to be reversed in order to meet the 2008 goal.

An additional measure of environmental improvement in the Bay is the reduction in nitrogen, phosphorus, an sediment entering the Bay. Under these measures, reductions in these pollutants are occurring and are offsetting a significant increase due to population growth, but the rate is not sufficient to attain the new Bay water quality standards. Maintaining reduced nitrogen and sediment levels will be a challenge due to expected growth in human and farm animal population in the region.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

- Increases in the percentage of wastewater treatment flow to the Bay that are treated by Biological Nutrient Removal are on track at the mid-year (i.e. 56% with an 2005 commitment of 60%).
- Increases in the miles of streambank and shoreline restored with riparian forest buffers are on schedule and are expected to meet or exceed the 2005 commitment (3,791 at mid-year with a 2005 target of 4,000 miles).

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report.

Next Steps

The Subobjective Team assessment included the following statement of needed actions:

"In 2000, the Chesapeake Bay Program partners (including the Administrator of EPA) committed to a goal of restoring Bay water quality by 2010. This idealistic commitment certainly created a sense of urgency within EPA and partner government agencies about (1) establishing new, attainable, water quality criteria and standards; and (2) agreeing to scientifically-supported, protective nutrient-sediment allocations.

The targets in EPA's 2005 plan for nutrient and sediment reductions are scientifically based and also reflect a multi-state consensus. However, the level of effort and expenditure to meet the allocations is immense (currently estimated at \$28 billion capital cost), far beyond what the Bay Program partners thought would be needed when they made the 2010 commitment.

The Program plans to conduct a full re-evaluation in 2007. In the meantime, the Program continues to pursue program strategies to accelerate nutrient-sediment reduction, including state adoption of enforceable bay-specific water quality standards by end of summer 2005, an innovative new basin-wide NPDES permitting strategy for nitrogen and phosphorus, and development of a strategy to address excess animal manure and poultry litter for Chesapeake Executive Council endorsement this fall. Attention is also being given to financing issues.

Improving performance on nutrient-sediment reduction is intimately related to availability of funds, in several ways:

- A) Financial assistance for "hardship-case" POTWs because meeting the allocations requires many POTWs to achieve very stringent nutrient limits -- near the limit of technology; financial assistance for farmers who must achieve unprecedented levels of nutrient removal; financial assistance for urban areas to achieve storm water retrofits that are beyond local ability to fund.
- B) Funding support for increased water quality monitoring, especially operating monitoring stations during wet weather.
- C) Increased funding of state/local programs for storm water permitting, compliance monitoring and enforcement."

The Chesapeake Bay Program is convening a meeting with high-level representatives from key Federal Agencies involved in Bay restoration to review program and funding relationships in the Fall of 2005. The Office of Water will participate in this conference.



SUBOBJECTIVE: GULF OF MEXICO

Subobjective (Part A): Prevent water pollution and improve the overall aquatic ecosystem health of coastal waters of the Gulf of Mexico by 0.2 on the "good/fair/poor" scale of the National Coastal Condition Report, a 5-point system in which 1 is poor and 5 is good:

2002 Baseline: fair/poor or **1.9 2005** Target: **2.0 2008** Target: 2.1

2004 Report: 2.4

Subobjective (Part B): Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico:

Baseline: 1996-2000 running average size is 14,128 km²

2015 Target: less than 5,000 km²

Performance Overview

The second edition of National Coastal Condition Assessment (NCCA II) indicates significant progress in improving conditions in the Gulf of Mexico. The original baseline score for the Gulf, using a range of indicators, was 1.9, or "fair to poor" on the 5 point scale, but the 2004 score is 2.4. This improvement is heightened when the original score is corrected using the improved methods of the new NCCR II. Using the new methods, the original score would have been 1.8 rather than 1.9. The indicator showing the greatest improvement in these corrected scores is water quality, increasing from 1 to 3. Benthic conditions score improved from 1 to 2. Scores for sediment quality (3) coastal habitat (1), and fish tissue contamination (3) remain the same.

Data is not now available to determine progress toward the goal of reducing the size of the hypoxic zone in the Gulf of Mexico.

Performance Highlights

Highlights of mid-year assessments of progress by the Subobjective Team include:

-- The Gulf of Mexico program is making good progress toward the FY 2005 commitment of 11,000 acres of coastal and marine habitat restored, enhanced, or protected. Total acres achieved are 15,995 toward the 2008 target of 20,000. The

substantial progress in this area is largely due to the success of our strategic partnerships with NOAA, The Nature Conservancy, National Fish and Wildlife Foundation, Corporate Wetlands Restoration Partnership, and Shell Marine Habitat Program.

- The Gulf Program expects to exceed the target for reducing the rate of shellfish-borne Vibrio vulnificus illnesses. Based on the rate at mid-year of 0.162 per million, the FY 2005 commitment of 0.194 should be exceeded. Achievements in this goal are attributable to broadened high risk consumer outreach and education efforts throughout strategically targeted consumer groups.
- The Gulf Program established the Lower Mississippi River sub-Basin Committee ahead of the 2006 target date.
- The Gulf of Mexico Program office is on track to meet commitments established for 2005 for the Gulf of Mexico Program and for the Gulf Hypoxia Program.

Additional information concerning performance under outcome measures and program activity measures is provided in Appendix A of this report..

Next Steps

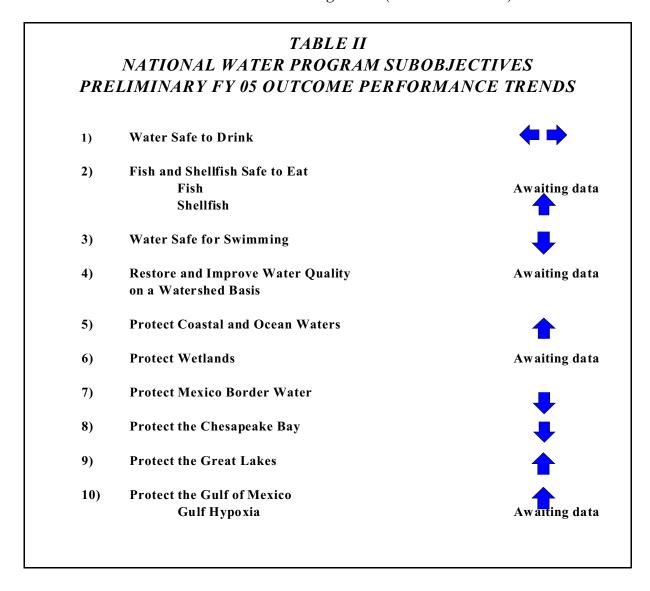
Key next steps identified by the Subobjective Team include:

- The Gulf Program will continue support for the identification and prioritization of the "100 Highest Opportunity Watersheds" in State performance partnership agreements which focus on nutrient reduction beginning in FY 07.
- The Gulf program will participate with the Gulf of Mexico Alliance, a regional partnership among the 5 Gulf States in response to the US Ocean Action Plan.
- The Gulf program will continue collaboration in the Industry Led Solutions voluntary strategy for nonpoint source nutrient management to reduce nutrients in the Gulf.
- The Gulf Program will participate with the Interagency Working Group on Methylmercury in the development of a mercury research strategy for the Gulf of Mexico.

III) CONCLUSIONS AND RECOMMENDATIONS

Overall conclusions concerning the performance of the National Water Program -- based on consideration of the subobjective-specific assessments as well as other evaluation projects summarized in the Appendix of this Report -- are described below. Recommendations for follow-up actions based on these conclusions are provided where appropriate and supplement the "next step" actions described in the preceding section of the report.

1) **Outcome Performance Results Mixed or Not Yet Established:** There is some evidence of progress toward the environmental and public health outcomes related to water that are described in the EPA *Strategic Plan* (see Table II below).



For example, comparison of progress under indicators in the National Coastal Condition Reports for 2000 and 2004 shows a slight overall improvement in the condition of coastal waters. The number of shellfishing acres open for use has increased. The Great Lakes and Gulf of Mexico show some overall improvement.

In the case of several subobjectives, preliminary data indicate shortfalls against expected environmental improvements (i.e. existing waters, Mexico border infrastructure, and conditions in the Chesapeake Bay. In other cases, outcome performance is not yet established. Data on drinking water compliance rates has not yet shown clear movement toward the 95% compliance goal for 2008. There is not yet evidence of progress in reducing limitations on fish consumption. Watershed scale restoration of water quality is lagging and measures of watershed scale improvement are not yet reported. Wetlands protection and restoration data are not yet complete.

- 2) **Strong Mid-Year Program Performance:** Although mid-year data is not available for all measures of program performance (i.e. PAMs), available data generally show sufficient progress at the mid-year to suggest that end-of-year commitments will be accomplished. In some cases, performance is well ahead of expected "mid-year" progress. In a few cases, significant shortfalls from expected performance (e.g. 30% of priority permits current) are being addressed.
- 3) **Consistent Regional Performance:** The assessments of performance under each subobjective (see Section II) do not directly address the performance of individual Regions. At the same time, review of program performance data generally does not suggest that any Region is under-performing with respect to FY 05 commitments.

Meetings of national program managers and Region 10 staff in May 2005 to review program performance (part of the National Water Program's ongoing review of Regional offices) identified program strengths as well as suggested follow-up actions (see Appendix D).

4) **Improved Water Program Integration:** A common theme of subobjective assessments of progress is the ongoing effort to increase integration of the implementation of water programs.

For example, national program managers reinforced efforts to complete critical work to improve integration of source water protection and water quality standards that is expected to significantly benefit both programs in the next several years.

In addition, the implementation of the water quality subobjective is now substantially driven at the Regional level by "Watershed Game Plans" developed by each Region. These Watershed Game Plans describe the water quality/watershed outcome goals in the Region, and define how the range of clean water programs (e.g. standards, planning,

permits, financing) will be used to accomplish needed improvements in specific waterbodies and watersheds.

5) **Expanded Outreach to Other Programs/Agencies:** The implementation of several key subobjectives is benefitting from an expanded effort to coordinate water program implementation with the work of other programs or agencies.

For example, the nonpoint source program at the national level and in several Regions, has expanded cooperation with USDA programs to better focus a range of resources on priority areas. The drinking water program is working with the Centers for Disease Control to improve measurement of waterborne disease outbreaks. EPA is also cooperating with NOAA, the Interstate Shellfish Sanitation Conference, and the FDA to improve data concerning the location of closed shellfishing areas.

6) **Tribal Water Program Implementation:** Tribal program activities measures are included in a number of different subobjectives. For a majority of the measures related to Tribes, data is either lacking or showing less than expected mid-year performance.

Recommendation: The existing Office of Water Tribal Steering Committee should review mid-year progress on all outcome and program measures related to Tribes and make a recommendation to subobjective teams concerning any needed actions.

7) **Coordination with Compliance and Enforcement:** Although program managers at the national and Regional levels work closely with compliance and enforcement program staff, expanding the coordination of program planning could improve success in accomplishing key water outcome measures.

Recommendation: The Office of Water should work with the Office of Enforcement and Compliance Assurance to define more formal program planning and coordination mechanisms, including procedures for sharing of program data and development of common criteria for definition of priority geographic areas.

8) Mercury and Water Issues: Issues related to mercury in water and fish are important to success under several subobjectives, including fish safe to eat, water quality, coastal water, and the Great Lakes. Progress toward reducing the limits on fish consumption depends to a large extent on reduction of mercury in air emissions. The expected increases in the number of waters listed as impaired because of violation of mercury criteria is an important consideration for setting targets for future waterbody restoration. Mercury is a factor in fish contamination in coastal waters reported in the National Coastal Condition Reports and plays a role in reducing the overall progress toward healthier coastal waters.

Recommendation: The Office of Water should review options for the presentation of data concerning mercury that would allow for water quality impacts attributable to mercury to be clearly identified as part of impairments as a whole and for EPA to be able to account for and report water quality impairments and improvements specifically associated with mercury.

9) **Reduce Data Lags:** A common problem in the management of programs and the measurement of program toward outcome goals is the length of time between a reporting period and the availability of data from the reporting period. In general, the quicker the turn-around time between the completion of a reporting period and the compilation of data, the more useful the data is. Measures of progress for the national water program have data response times ranging from virtually real time to as long as four years.

Recommendation: The existing Office of Water Information Steering Committee should conduct a review of data system response times with the goal of identifying means to reduce response times. Where reduction of response times requires investments, these investments should be ranked and scored along with other possible information system investments.

10) Water Program Performance Assessment: The National Water Program is making a significant investment in program planning, including the development of water elements of the Agency Strategic Plan and implementation of the Plan through annual National program guidance. In addition, the National Water Program is increasing investment in assessment of program performance, including assessment of progress under the Strategic Plan as well as under the Program Assessment and Rating Tool (PART) and other efforts (e.g. Permitting for Environmental Results, Drinking Water Key Indicators, Environmental Results Order). {Note that a strong score under the PART process is more likely where a program can show consistent assessment of performance by internal and external parties; see PART questions 2.6 and 4.5.} At the same time, other parties, including the Inspector General and the Government Accountability Office, assess aspects of the water program.

Recommendation: The National Water Program should respond to the growing importance of performance assessment (distinct from program planning) by increasing management attention to program performance. The Program should consider a range of options to increase coordination of water program performance activities (ranging from assessments under measures in the *Strategic Plan*, to program specific evaluations, to Regional office reviews). The Program should also work to improve coordination of evaluations of specific water programs by outside parties including the Office of Management and Budget PART process and studies by the EPA Inspector General and the Government Accountability Office. A goal of this effort should be to develop periodic reports to water managers providing an overall assessment of both program performance and needed management actions.

APPENDICES

APPENDIX A:

Slides Describing Mid-Year Progress

for Program Measures

in Each Region and Nationally

are Available on the Internet at:

www.epa.gov/water/waterplan

APPENDIX B:

EPA Office of Inspector General Water Team Study Findings and Recommendations - 2004/05

1) TITLE: EPA Needs to Reinforce Its National Pretreatment Program (2004-P-00030) September 28, 2004

OBJECTIVES (Field Work)

- How effectively have the pretreatment regulations controlled industrial user discharges?
- What are the differences in how publicly owned treatment works (POTWs) with and without approved pretreatment programs oversee their industrial users and do these differences affect protection of the plant and receiving waters?
- How well is EPA maintaining its program gains and addressing future needs and do EPA's pretreatment measures show the program's progress?

FINDINGS

- Pretreatment program gains have leveled off.
- More POTWs need to adopt national pretreatment programs
 - Programs with pretreatment programs more likely to meet standards.
 - POTW program implementation can be improved for identifying industrial users and enforcement.
 - Regional and State support and oversight can be improved for POTWs without approved programs
 - Pretreatment program needs improved direction, data, and performance measures
 - EPA can improve leadership
 - Better information and analysis is needed
 - Performance measures need to be results-based

RECOMMENDATIONS

3.1 Finalize its guidance on regulating industrial users discharging to a POTW without an approved program and provide milestones for doing so to the OIG. If not finalized in 90 days, provide quarterly progress reports to the OIG until action is complete.

- 3.2 For Regions and States unable to follow EPA's guidance for basic oversight of industrial users discharging to POTWs without approved programs, encourage the Regions/States to have these POTWs assume oversight responsibilities as part of their NPDES permit requirements.
- 3.3 Encourage Regions/States to have POTWs without approved programs that are conducting oversight responsibilities to report on an annual basis violations and enforcement action taken to their control/approval authority.
- 3.4 Promote training opportunities to all POTWs by determining: a) the POTWs' ability to access information on EPA's website, and b) the types of training POTWs need.
- 4.1 Develop a long-term strategy to identify the data it needs for developing pretreatment results-based measurements; determine the resources necessary to carry out the strategy; and gain the support of other Agency State, and POTW staff to carry out the strategy. Provide a milestone for the development of this strategy to the OIG, and if the strategy cannot be completed with in 90 days of report issuance, provide quarterly progress reports to the OIG until results-based measures are developed.
- 4.2 Set milestones for finalizing the streamlining rule, local limits, and other applicable guidance. Provide milestone dates to the OIG, and if the products are not completed within 90 days of report issuance, provide quarterly progress reports to the OIG until the products are finalized.
- 4.3 Evaluate the resource needs of the pretreatment program to enable it to make further reductions in industrial waste transfers and risk. The additional funding should be requested in the next funding cycle.

AGENCY RESPONSE

In letters from Ben Grumbles dated December 29, 2004, and March 15, 2005, EPA committed to carrying out 2 Strategies:

- 1) "Strategy for Regulating Industrial Users Discharging to POTWs without Approved Pretreatment Programs" and;
- 2) "Strategy for Pretreatment Program Results-Based Measures."

These 2 strategies have completion dates of December 2006 and June 2007, respectively.

2) TITLE: Effectiveness of Effluent Guidelines Program for Reducing Pollutant Discharges Uncertain (No. 2004-P-00025), August 24, 2004

OBJECTIVES (Field work)

- How has EPA's effluent guidelines development process changed over time?
- How effectively are effluent guidelines used to reduce pollutant loadings?
- To what extent does EPA measure the effectiveness of the effluent guidelines program?

FINDINGS

- Effluent guidelines program has undergone changes
 - Coverage has increased: broader range of pollutants covered, broader range of industries covered, more effluent guidelines promulgated
 - Some changes resulted from task force recommendations
 - EPA reevaluating future effluent guidelines program
- Effectiveness of effluent guidelines remains uncertain
 - Lag in reissuing permits delayed realizing benefits
 - Reissued permits employ guidelines to large extent
 - Data largely unavailable, although discharge reductions noted in most cases reviewed: data largely lacking
 - Facilities implementing effluent guidelines demonstrated pollutant discharge reductions
 - Due to the lack of pollutant discharge data, OIG cannot determine whether this program is achieving environmental improvements.
- EPA does not adequately measure program performance
 - Congress and the President require EPA to report on program effectiveness (GPRA, PART)
 - EPA has identified useful goals and performance measures
 - EPA's performance reports are imprecise: accuracy of reduction projections untested; estimated of facilities using guidelines untested

Because EPA cannot measure the effectiveness of the program, OW cannot ensure that (1) resources are allocated appropriately and efficiently (2) the program is accomplishing its pollution reduction goals.

RECOMMENDATIONS

- 3.1 Evaluate the effectiveness of effluent guidelines by systematically collecting pollutant discharge data before and after an effluent guideline is promulgated for a select number of facilities for each guideline.
- 4.1 Develop performance measures that are based on actual pollutant discharge data rather than discharge estimates gathered before effluent guideline was effective.
- 4.2 Work with OECA to ensure that it develops a required field in the modernized PCS to capture the effluent guideline or guidelines that apply to each permitted facility.

AGENCY RESPONSE

OW agreed with the findings of the report. OW raised some valid concerns about the costs of *systematically* evaluating the effectiveness of all effluent guidelines. Program agreed to conduct retrospective analysis on a sample of guidelines and comparing the sampling data collected during the revision of an effluent guideline with that collected during the original promulgation. It is not clear how information from analysis will be used to develop performance measures and evaluate effectiveness of the program. OW agreed to also work with OECA to include a new effluent data element into PCS.

3) TITLE: States Making Progress on Source Water Assessments, But Effectiveness Still to Be Determined (2004- P - 00019), May 27, 2004

OBJECTIVES (Preliminary research)

- What is the status of source water assessment submissions?
- Are source water assessments fulfilling the needs of the programs?
- How is success of the programs measured?

FINDINGS

- Source water assessment progress varies
 - Assessment submissions making progress, but not complete

- States provided a variety of reasons for untimeliness of the assessment completions: limited human resources, competing interest, data issues, public participation, establishing partnerships, and desire for a quality product.
- Assessments found to be beneficial for state drinking water protection efforts
- Measuring program success still work in progress with some key problems beings variation in state assessments, difficulty in quantifying/defining protection strategies, limited baseline/trends, and difficulty in adapting to EPA-required format.
- Other issued identified: (1) Clarification needed regarding security and information availability; (2) Citizens on private well water may not be protected; (3) Federal resources allocated to update assessments are limited; and (4) Local input on assessments sometimes perceived as limited.

RECOMMENDATIONS

- 2-1 Continue development and establishment of source water assessment program measures that better capture the program's results. In the EPA/State workgroup discussions to finalize the SWAP measures and reporting requirements, we recommend that EPA revisit the State agency concerns raised in this report, solicit and evaluate alternatives, and resolve the concerns to the satisfaction of the group.
- 2-2 Given the uncertainty as to what assessment information can and should be released to the public, and with the limitations in light of recent security concerns, continue to develop and issue guidance to the States on what assessment information is appropriate to release to the public and by what means different types of information should be distributed.

AGENCY RESPONSE

- Agency agreed to consult with the Regions and develop guidance on source water and security concerns.
- Agency agreed to continue to work with EPA/State workgroup to come up with measures
- Agency suggested that OIG follow up study focus on barriers that states and localities face in implementing source water protection based on assessments.

4) TITLE: Stronger Leadership Needed to Develop Environmental Measures for Clean Water State Revolving Fund (Report No. 2004-P-00022, June 23, 2004

OBJECTIVES

- What plan does EPA have that to ensure that the environmental value of the CWSRF can be measured?
- What efforts has EPA made to measure the environmental results of CWSRF projects?
- What actions have states taken to measure CWSRF results?

FINDINGS

- EPA has financial but not environmental measures for the CWSRF
- EPA needs a comprehensive plan for measuring environmental results of the CWSRF

RECOMMENDATIONS

- OW needs to develop a plan with milestone dates that
 - -(1) Establishes the value of measuring environmental benefits by identifying how this information would be used by EPA and states in making future decisions about the CWSRF program.
 - (2) Seeks input from other EPA offices, Federal agencies, states, and other stakeholders on options for measuring environmental contributions of the CWSRF program
 - (3) Identifies and evaluates options for measuring environmental benefits and considers for each option: strengths and weakness, feasibility of implementation by all states; cost; and validity of available data
 - -(4) Selects an option and establishes an implementation plan

AGENCY RESPONSE

- The agency agreed with the findings and recommendations in the report
- The agency indicated that it is already doing most of the items listed by the OIG.

5) TITLE: EPA Claims to Meet Drinking Water Goals Despite Persistent Data Quality Shortcomings (No. 2004-P-0008) March 5, 2004

OBJECTIVES

- How do incorrect or incomplete drinking water data affect the drinking water GPRA calculation?
- What actions has EPA undertaken to ensure that drinking water data collected and distributed to the public are reliable and valid? [Note: During the preliminary research phase, the OIG learned that the Office of Water was conducting analyses that largely overlapped its own, and was working with other stakeholders to address data quality problems. Since OIG team had already completed work on the first question but not the second, they reported results on the first and not the second.]

FINDINGS

- EPA consistently reported meeting drinking water goals.
- EPA reports data quality problems while reporting performance goals met.
- EPA and OIG reviews indicated GPRA measure less than reported.
 - EPA reports indicate drinking water data quality improved but still "low"
 - OIG review of EPA's database confirmed agency's assessment

RECOMMENDATIONS

- No recommendations.
- OIG report suggested that the Agency change how it reports under GPRA to compensate for known concerns over the reliability of the drinking water measure

AGENCY RESPONSE

- The Agency did not directly acknowledge the reports principle finding concerning the incorrect conclusions about drinking water performance contained in recent annual performance reports. In addition, while the Agency agreed to continue to improve how EPA communicates health risk associated with drinking water, no commitment to specific steps to correct the inconsistencies we had pointed were agreed to.

APPENDIX C:

Government Accountability Office Reports Related to Water Programs Findings and Recommendations - 2004/05

1) TITLE: Great Lakes: Organizational Leadership and Restoration Goals Need to Be Better Defined for Monitoring Restoration Progress (GAO-04-1024: September 2004) http://www.gao.gov/new.items/d041024.pdf

OBJECTIVES

As requested, this report:

- (1) determines the extent to which current EPA monitoring efforts provide information for assessing overall conditions in the Great Lakes Basin,
- (2) identifies existing restoration goals and whether monitoring is done to track goal progress, and
- (3) identifies the major challenges to setting restoration goals and developing a monitoring system.

FINDINGS

- Current Environmental Protection Agency (EPA) monitoring does not provide the comprehensive information needed to assess overall conditions in the Great Lakes Basin because the required coordinated joint U.S./Canadian monitoring program has not been fully developed. Information collected from monitoring by other federal and state agencies does not, by design, provide an overall assessment of the Great Lakes because it is collected to meet specific program objectives or limited to specific geographic areas.
- Multiple restoration goals have been proposed through efforts by EPA and other organizations. EPA developed basin-wide goals through its Great Lakes Strategy 2002 and goals for plans addressing individual lakes. Other organizations have also identified basin-wide restoration goals and priorities. Monitoring of progress toward goals is generally limited to tracking specific action items proposed in the Great Lakes Strategy 2002; other proposed goals are generally not monitored to determine progress.

- Efforts to coordinate basin-wide goals and a monitoring system face several challenges.
 - (1) The lack of clearly defined organizational leadership poses a major obstacle. Both EPA's Great Lakes National Program Office (GLNPO) and a newly created interagency task force have coordination roles raising uncertainty as to how leadership and coordination efforts will be exercised in the future.
 - (2) Coordinating existing restoration goals and monitoring activities among the many participating organizations within the United States, and between the United States and Canada is a significant challenge.
 - (3) Centralized information from monitoring activities is not yet available, making it difficult to assess restoration progress. In addition, an inventory system developed by EPA and Canada may not have adequate controls on voluntarily provided information.

RECOMMENDATIONS

GAO recommends EPA develop controls to ensure the Great Lakes monitoring system inventory is complete, accurate, and consistent. Also, the Congress may wish to consider clarifying if GLNPO or the task force should lead restoration efforts and require development of measurable basin-wide goals with a monitoring system for measuring progress.

AGENCY RESPONSE

EPA agreed with GAO's recommendation regarding adequate inventory monitoring controls. EPA believes responsibilities and relationships for the task force and GLNPO are clearly stated in the executive order and statute but did not address GAO's concerns about how GLNPO will exercise its leadership and coordination responsibilities.

2) TITLE: WATERSHED MANAGEMENT: Better Coordination of Data Collection Efforts Needed to Support Key Decisions. (GAO-04-382, June 2004)

http://www.gao.gov/new.items/d04382.pdf

OBJECTIVES

To address a number of issues concerning the water data that various organization collect, the Chairman of the Subcommittee on Water Resources and Environment asked GAO to determine (1) the key entities that collect water data, the types of data they collect, how they store the data, and how entities can access the data; and (2) the extent that water quality and water quantity data collection efforts are coordinated.

FINDINGS

- At least 15 federal agencies collect a wide variety of water quality data. Most notably, the U.S. Geological Survey operates several large water quality monitoring programs across the nation. States also play a key role in water quality data collection to fulfill their responsibilities under the Clean Water Act. In addition, numerous local watershed groups, volunteer monitoring groups, industries, and academic groups collect water quality data. In contrast, collection of water quantity data is more centralized, with three federal agencies collecting the majority of data available nationwide.
- While GAO found notable exceptions, officials in almost all of the federal and state agencies contacted said that coordination of water quality data was falling short of its potential. As illustrated below, key barriers frequently identified as impeding better coordination of water quality data collection include:
 - (1) the significantly different purposes for which groups collect data,
 - (2) inconsistencies in groups' data collection protocols,
 - (3) an unawareness by data collectors as to which entities collect what types of data, and
 - (4) low priority for data coordination, as shown in a lack of support for councils that promote improved coordination.
- GAO concluded that designating a lead organization with sufficient authority and resources to coordinate data collection could help alleviate these problems and ensure that watershed managers have better information upon which to base critical decisions.
- Data collectors strongly agree that coordinating water quantity data collection is considerably less problematic. Reasons include the fact that controversial water allocation decisions require accurate and complete water quantity data; that some of the technologies for measuring water quantity allow for immediate distribution of data; that water quantity data parameters are generally more consistent; and that coordination is simplified in that relatively fewer entities collect these data. Collectors of water quantity data generally agreed that an overall shortage of data was a more serious problem than a lack of coordination of the data that are collected.

RECOMMENDATIONS

To enhance and clearly define authority for coordinating the collection of water data nationwide, the Congress should consider formally designating a lead organization for this purpose. Among its responsibilities, the organization would:

(1) support the development and continued operation of regional and state monitoring councils;

- (2) coordinate the development of an Internet-based clearinghouse to convey what entities are collecting what types of data; and
- (3) coordinate development of clear guidance on metadata standards so that data users can integrate data from various sources.

3) TITLE: Water Quality: Program Enhancements Would Better Ensure Adequacy of Boat Pumpout Facilities in No-Discharge Zones, (GAO-04-613: May 2004)

http://www.gao.gov/new.items/d04613.pdf

OBJECTIVES

As requested, this report assesses

- 1) EPA's process for determining the adequacy of facilities to remove and treat sewage in proposed no- discharge zones;
- (2) the extent to which EPA and the states ensure that adequate facilities remain available after designation;
- (3) the extent to which the Coast Guard and the states enforce discharge prohibitions; and
- (4) various effects of no-discharge zones, as identified by EPA, states, and localities.

FINDINGS

- EPA's process for determining whether adequate facilities are reasonably available to remove and treat sewage from boats in proposed no-discharge zones could be improved. EPA currently requires states to submit general estimates of need for facilities (known as pumpouts) in state applications for no-discharge zones, but other information that would support site-specific estimates is optional. As a result, EPA does not receive this information consistently.
- GAO found no EPA and limited state oversight of pumpout facilities after no-discharge zones are established. The Clean Water Act does not address the monitoring of such facilities in established no-discharge zones, nor does it define a specific role for EPA after the agency has initially determined that the facilities are adequate.
- The Coast Guard limits its enforcement of no-discharge prohibitions to the three federally designated no-discharge zones; it does not enforce them in the 56 state-designated zones. While the Clean Water Act grants the Coast Guard authority to enforce in all no-discharge zones, Coast Guard's regulations exercise enforcement authority only

in areas where discharges are prohibited by EPA regulations—currently the three federally designated zones. GAO found that states enforced in different ways, such as by issuing tickets or inspecting boats. Many states place more emphasis on boater education than on penalizing violators.

- Although few data are available to assess the effects of no-discharge zones, a number of EPA, state, and local officials believe that water quality and environmental stewardship have increased after designation of these zones. In addition, officials cite gallons of boat sewage pumped as evidence that no-discharge zones reduce water pollution.

RECOMMENDATIONS

GAO recommends that EPA better ensure that facilities are and remain adequate in nodischarge zones and that EPA and the Coast Guard meet with relevant states to review and clarify enforcement roles.

AGENCY RESPONSE

EPA agreed with the recommendations and EPA and the Coast Guard provided technical comments about the Coast Guard's enforcement role that are incorporated in the report.

4) TITLE: Wastewater Facilities: Experts' Views on How Federal Funds Should Be Spent to Improve Security (GAO-05-165, January 2005)

http://www.gao.gov/new.items/d05165.pdf

OBJECTIVES

GAO was asked to obtain experts' views on

- (1) the key security-related vulnerabilities affecting the nation's wastewater systems,
- (2) the activities the federal government should support to improve wastewater security, and
- (3) the criteria that should be used to determine how any federal funds are allocated to improve security, and the best methods to distribute these funds.

GAO conducted a systematic, Web-based survey of 50 nationally recognized experts to seek consensus on these key wastewater security issues.

FINDINGS

- Experts identified the collection system's network of sewer lines as the most vulnerable asset of a wastewater utility. Other vulnerabilities most frequently cited were: (1) the storage and transportation of chemicals used in the wastewater treatment process and the automated systems that control many vital operations; (2) a general lack of security awareness among wastewater facility staff and administrators; (3) interdependencies among various wastewater facility components leading to the possibility that the disruption of a single component could take down the entire system; and (3) interdependencies between wastewater facilities and other critical infrastructures.
- Experts identified several key activities as most deserving of federal funds to improve wastewater facilities' security including: (1) the replacement of gaseous chemicals used in the disinfection process with less hazardous alternatives; (2) improving local, state, and regional collaboration; and (3) supporting facilities' efforts to comprehensively assess their vulnerabilities.
- When asked how federal wastewater security funds should be allocated among potential recipients, the vast majority of experts suggested that wastewater utilities serving critical infrastructure (e.g., public health institutions, government, commercial and industrial centers) should be given highest priority. Other recipients warranting highest priority included utilities using large quantities of gaseous chemicals and utilities serving areas with large populations.
- Experts identified direct federal grants as the most effective method to distribute the funds, noting particular circumstances in which a matching contribution should be sought from recipients. The other funding mechanisms experts mentioned most frequently included the federal Clean Water State Revolving Fund, loans or loan guarantees, trust funds, and tax incentives.

RECOMMENDATIONS

GAO had no recommendations.

AGENCY RESPONSE

- EPA expressed general agreement with the report, citing its value as the agency works with its partners to better secure the nation's critical wastewater infrastructure.

APPENDIX D:

Water Program PART Reviews: Status Report

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|-------------------------|--|-----------------|-------------------|---------------------------|
| | | R | | - 1 |
| 7-10 | Program | Years Evaluated | FY 06 PART Rating | FY 04 Budget |
| \$ \$ F & | Drinking Water State Revolving Fund | 2002/03/04 | Adequate | \$845 million |
| | Public Water Supply Systems | 2004 | Adequate | \$102 million |
| - Artimet | Underground Injection Control | 2004 | Adequate | \$11 million |
| L. T. | Nonpoint Source | 2002 / 03 / 04 | Adequate | \$237 million |
| After the Storm | Clean Water State Revolving Fund | 2003/04 | Adequate | \$1.3 billion |
| | Mexico Border | 2004 | Adequate | \$50 million |
| \$ | Tribal Grant Assistance Program | 2002 | Adequate | \$62 million |
| Clean Water | Alaska Native Villages | 2004 | Ineffective | \$43 million |
| M | Surface Water Protection | 2005 | TBD | \$184 million |
| - | Pollution Control State Grants (106) | 2005 | TBD | \$199 million |
| 702 | Oceans & Coastal Protection | 2005 | TBD | \$38 I nillion |

Possible Future PART Studies:

Drinking Water Protection (EPM) (with or without water security) Great Lakes Chespeake Bay Gulf of Mexico Targeted Watershed Grants

APPENDIX E:

Region 10 Water Program Visit May, 2005 Summary and Follow-up-Actions

To be Posted to the Internet at:

www.epa.gov/water/waterplan